

CHAPTER 03

Pair of Linear Equations in Two Variables

Note:

$$4x - y - 13 = 0$$

$$a_1x + b_1y + c_1 = 0$$

$$\Rightarrow a_1 = 4, b_1 = -1, c_1 = -13$$

$$5x + y - 14 = 0$$

$$a_2x + b_2y + c_2 = 0$$

$$\Rightarrow a_2 = 5, b_2 = 1, c_2 = -14$$

$$\text{Here, } \frac{a_1}{a_2} = \frac{4}{5}, \frac{b_1}{b_2} = \frac{-1}{1}, \frac{c_1}{c_2} = \frac{-13}{-14},$$

$$\frac{a_1}{a_2} \neq \frac{b_1}{b_2},$$

Since, $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ therefore they are intersecting lines and hence, it is a consistent pair of linear equation.